

What is claimed is:

1. A photoimageable composition comprising:
  - i) a photoactive component;
  - 5 ii) a component that that comprises one or more Si atoms; and
  - iii) a component that comprises one or more sulfonamide groups.
2. The photoimageable composition of claim 1 wherein a single component comprises both one or more Si atoms and one or more sulfonamide groups.
- 10 3. The photoimageable composition of claim 1 wherein the photoimageable composition comprises a polymer that comprises both one or more Si atoms and one or more sulfonamide groups.
- 15 4. The photoimageable composition of claim 3 wherein the polymer further comprises photoacid-labile groups.
5. The photoimageable composition of claim 4 wherein the photoacid-labile groups are ester groups or acetal groups.
- 20 6. The photoimageable composition of claim 3 wherein the polymer comprises aromatic groups.
7. The photoimageable composition of claim 3 wherein the polymer
- 25 comprises phenyl groups.
8. The photoimageable composition of claim 3 wherein the polymer is substantially free of aromatic groups.
- 30 9. The photoimageable composition of claim 1 wherein the photoimageable composition comprises a polymer that contains one or more Si atoms and a distinct component that comprises one or more sulfonamide groups.

10. The photoimageable composition of claim 9 wherein the photoimageable composition comprises a polymer that contains one or more Si atoms and a distinct polymer that comprises one or more sulfonamide groups.

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11. The photoimageable composition of claim 1 wherein the composition comprises a polymer that has one or more Si atoms and one or more aqueous base-solubilizing groups.

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12. The photoimageable composition of claim 11 wherein aqueous solubilizing groups are fluorinated alcohols, carboxylic acid and/or thiols.

13. The photoimageable composition of claim 1 wherein the composition comprises a polymer that comprises at least three distinct repeat units.

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14. The photoimageable composition of claim 1 wherein the composition is a chemically-amplified positive acting photoresist.

15. The photoimageable composition of claim 1 further comprising a crosslinker component.

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16. The photoimageable composition of claim 1 wherein the composition is a negative-acting photoresist.

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17. A coated substrate comprising:

- a) a polymer composition coating layer applied over a substrate surface;
- b) a coating layer of a photoimageable composition of claim 1 disposed above the polymer composition coating layer.

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18. A coated substrate of claim 17 wherein the polymer composition comprises a phenolic resin.

19. A method for forming a electronic device, comprising:
- (a) applying on a substrate a coating layer of a polymer composition;
  - (b) above the polymer composition coating layer, applying a photoimageable composition of claim 1;
  - 5 (c) exposing the photoimageable composition coating layer to activating radiation and developing the exposed photoimageable layer.
20. An article of manufacture comprising a substrate comprising a coating layer of a photoimageable composition of claim 1.
- 10 21. A photoresist composition comprising a photoactive component and a resin that comprises one or more Si atoms and one or more sulfonamide groups.
- 15 22. The photoresist composition of claim 21 wherein the resin is a silsesquioxane.
23. A coated substrate comprising:
- a) an organic polymer composition coating layer applied over a substrate surface;
  - 20 b) a coating layer of a photoresist composition of claim 21 disposed above the polymer composition coating layer.